

Knowledge Management Peculiarities in MSMEs

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Knowledge Management (KM) in Micro, Small and Medium enterprise (MSMEs) have unique and different process with large business in running the business and decision making process. These different coming from how the company manage the knowledge. MSMEs use to have more informal culture and structure compared to large organization. These informal knowledge usually owned by the founder. This type on knowledge known as tacit knowledge. MSMEs often rely heavily on the expertise of their expertise and experiences if their employee or founder who possess tacit knowledge. So, Capturing and sharing tacit knowledge becomes crucial for business success. Enabling knowledge sharing if very necessary for long term MSMEs resilience. The knowledge sharing process may happen organically through daily interaction rather than formalized process. MSMEs also have limited resources include financial, human resources. This can impact the ability to invest in sophisticated KM System or dedicated personnel to manage knowledge. These knowledge management peculiarities can provide valuable insights and best practices, implement Strategy such as low cost tools, and building networking. Emphasizing a culture of continuous learning and encouraging employee to document and share their expertise can also contribute to effective knowledge management in MSMEs.

Keywords: Knowledge Management, MSMEs, Peculiarities.

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1. Introduction

MSMEs constitute an essential source of livelihood in the ASEAN region, and thus, they are critical for post-COVID-19 recovery and future socio-economic resilience. MSMEs account for between 97% and 99% of all firms, 85% of the labor force, approximately 45% of the gross domestic product (GDP), and between 10% and 30% of total exports. Although MSMEs are the backbone of the ASEAN region, they face a range of challenges that threaten their survival and hinder their capacity for growth. MSME needs to adapt business processes to survive the crisis and adapt to change. Ebrahimi, (2000) [1] This change is made by changing one business function or the entire business model. Zott (2013) [2] describe a business model as the content, structure, and governance of transactions designed to create value by exploiting business opportunities. A good business model can explain how and why customers, suppliers, and other supporting elements interact with the company through digital/information technology interfaces. As the environment changes, the business model guides how the value architecture can be changed and a systemic framework for maintaining overall coherence [3]

One of the internal resources is knowledge. Previous research has shown a relationship between knowledge and products and services [4] with innovation activities [5], knowledge management as a stimulus to innovate business models Hock-Doepgen [6]. Knowledge is one of the intangible resources, which according to Barney, is capable of influencing organizational performance apart from other intangible resources, namely innovation and organizational trust.

In Micro, Small, and Medium Enterprises, owner knowledge is a source of future economic benefits, contributing to the uniqueness of each SME and creating a competitive advantage. Heterogeneous SMEs and issues involving intangible assets depend on the nature, activities of SMEs and their size and stage of development. Some SMEs are built entirely on their intangible assets, whereas other intangible assets mainly complement physical and financial assets. Instead of competing based on physical and financial capital, the performance of SMEs is influenced by the knowledge, experience, and skills of the owners and their employees [7]. The main advantages of SMEs lie on two sides: the simplicity of their internal structure and the porosity of organizational boundaries. SMEs have the flexibility to maintain close contact with the market, which is the key to innovation. UKM that have survived for many years and even their business has been passed on to the next generation certainly have knowledge passed down from generation to generation. In Indonesia, several MSMEs have survived more than 20 years; they have been able to survive various crises. In general, these SMEs are owned by families with a family management system that is traditional or semi-modern. The success of surviving in the long term and against the crisis is why this research was conducted.

SMEs are judged by the external world, such as lending institutions, investors, suppliers, and customers, on their knowledge and knowledge-exploitation capabilities. The external world puts a burden on the SME to show the depth of their expertise, and their capabilities in leveraging this know-how. Many large companies who have thoughts of buying out smaller enterprises do so because of their know-how. Even if an SME is not brought out, and decides to expand, let's say via an initial public offering (IPO), judgments will be based on know-how and innovative potentials of them.

Our study makes several contributions to the SME literature by offering evidence of the knowledge for MSMEs' survival in environments of low munificence. For practitioners, this paper reinforces the importance of the management owners' innovativeness, initiatives, and support, and the level of social interaction and high level of trust among SMEs as enablers of effective KM processes in SMEs

2. Literature Review and Problem Statement

Intangible asset

Zhang (2017) [8] recognizes that intangible assets are non-monetary resources without physical substance. Meanwhile, Martimezet., et al (2019) [9] claims that Intangible resources cannot be easily obtained in the market or easily imitated by competitors. Bitner et al (2007) [10] links intangible resources with intellectual capital or knowledge, which comes from acquiring, coding, and disseminating information and is then used to learn new skills through training and development and redesigning business processes.

Intangible knowledge is a significant source of competitive advantage. Some of these assets may be patents, copyrights, intellectual property rights or other types of rights, employee know-how, and owner know-how. The more structured and codified knowledge is, the more likely it is to be shared with others. There are two types of knowledge: tacit and explicit [12].

Explicit knowledge is the most accessible and transferable form of knowledge and is the simplest and most basic form of knowledge. Explicit knowledge is the most available and accessible to pass on, structured and organized, easy to access and share, and storable and accessible. This type of knowledge is a common organizational asset. Storage and retrieval is usually done using a document management system or database.

Tacit Knowledge is the knowledge that exists in a person's brain/mind according to one's understanding, expertise, and experience. Usually, this knowledge is unstructured, difficult to define and describe in formal language, and its content includes personal understanding. This knowledge is generally not documented

because it is still in one's expertise or experience, so it is stored in each person's mind. In contrast, explicit knowledge is the knowledge that has been collected, translated, and poured into a form of documentation to make it easier to understand and disseminate to others. This knowledge is formal, systematic, and easy to share with others in the form of documentation because, in general, it is theoretical knowledge which makes it easier for experts to share their knowledge with others through books, articles, and journals without having to meet in person to tell others.

The success of SMEs in using knowledge as the key to survival is divided into three dimensions: knowledge creation, knowledge sharing, and knowledge reuse. Knowledge creation is the development of new ideas through the interaction of explicit and tacit knowledge [11]. This process assists operational activities, identifies new opportunities, and supports innovation for organizational growth [12]. Factors that drive knowledge creation are employee competencies, attitudes, and intellectual agility. [13] Also, there is a formal organizational structure, such as a team dedicated to problem-solving and a technology incubation structure, so that it can help create knowledge.

Seci Model

Knowledge becomes a resource capable of creating a competitive advantage if it can be created, processed, and shared with other organizational members. In the process of sharing knowledge, there are several forms. According to Nonaka and Takeuchi, there are 4 modes of knowledge conversion. The model in question is called the SECI model. The following is an explanation of the particular model. SECI itself stands for *Socialization, Externalization, Combination, and Internationalization*. These four models are discussed.

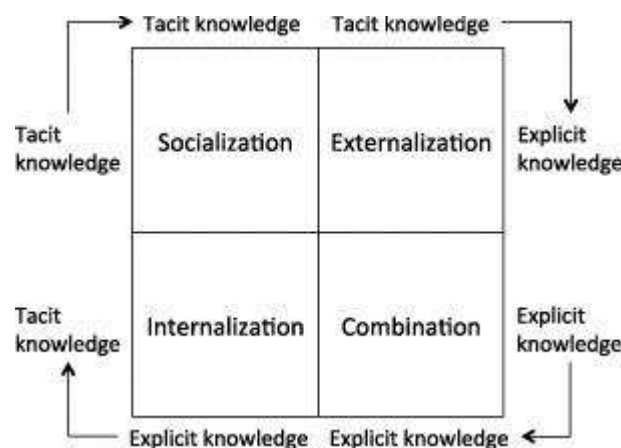


Figure 1. SECI Model

The success of SMEs in using knowledge as the key to survival is divided into those four dimensions. The interview instrument used in this study was based on the SECI model.

Micro, Small and Medium Enterprise

MSMEs constitute an important source of livelihood in the ASEAN region and thus they are critical for post-COVID-19 recovery and future socio-economic resilience. In ASEAN, MSMEs account for between 97% and 99% of all firms, 85% of the labour force, approximately 45% of the gross domestic product (GDP) and between 10% and 30% of total exports. Most of the MSMEs (72%–85%) in ASEAN operate in rural areas. This means that many of them have restricted access to both basic infrastructure, such as electricity and communication, and digital infrastructure, such as broadband Internet. challenge access to international markets, constraints affecting their capacity to innovate, low technology adoption, high cost of

production, a lack of skilled labour and limited access to financial services. The MSME category in each country is different. In Indonesia the classification of MSME is as follows:

Table 1. MSMEs Classification

Business Size	Criteria	
	Net Worth (excluding land and Building)	Annual Sales
Micro Business	Maximum IDR50Million	Maximum IDR 300Million
Small Business	IDR 50 million– IDR 500million	IDR 300 million– IDR.2,5 billion

(Source: Law Number 20 of 2008)

MSME's need not only physical assets but also non-physical assets or intangible assets. According to Nonaka and Takeuchi (1995)[14], the fundamental reason why companies in Japan are successful is because of their skills and experience in the management/creation of knowledge in organizations where knowledge is intellectual capital owned by humans as an element of human capital. In Indonesia, MSME's are one of the economic pillars considered to have the best resilience to the crisis. Since the monetary crisis in 1998 and 2008, MSME's have been considered capable of surviving compared to large companies. However, in 2020, during the crisis caused by the Covid-19 Pandemic, it turned out that MSME's were one of the businesses that were most affected. The ability to survive, recover and bounce back when faced with threatening external events such as crises is an essential issue for strategic management research, especially for micro, small, and medium enterprises (MSME's).

The resilience of the MSME business in Indonesia can be seen from Bank Indonesia, as many as 90.10% of MSMEs experienced a decline in sales, 47.40% of MSMEs lowered their selling prices to increase buyer interest, 59.60% of MSMEs acknowledged that the availability of raw materials had decreased due to the limited distribution process, 49.20 % of MSMEs did layoffs, and 86.20% of MSMEs were less able to pay installments. In addition, data released by the Kemenkop MSME's shows that 949 MSME cooperative actors are affected by the pandemic. Most (68%) of the problems MSME's face are declining sales, 12% have problems with capital difficulties, 10% are hampered distribution problems, and the rest are due to raw material difficulties and production delays. Bank Indonesia also reported that only 12.50% of MSMEs could survive without experiencing problems, and 27.6% showed increased sales. The ability to survive, recover and bounce back when faced with threatening external events such as crises is an essential issue for entrepreneurship research and strategic management, especially for micro, small, and medium enterprises (MSME's).

3. Results and Discussion

Our sample consisted of 3 SMEs from 3 different industries. The diiferentcies industry in our sample helps us generalize the presence of peculiarities of managing knowledge. Sampel also choose by certain commonalities across the SMEs. First, all SMEs, in our sample, have more than 2 until 8 employees Secondly, all SMEs were in business for more than two years, and their revenues less than 500 million per year. Data was gathered using qualitative methods due to the novel nature of the phenomena being examined [15] using semi-structured interviews with the owners of the SMEs for data collection. Data collected then analyzed with NVIVO software.

From the wordcloud image above and cluster analysis, two main codes were obtained, namely employees and knowledge. Both are then divided into other codes as described in the table below:

Table 2. Word Clustering

First Cluster	Second cluster	Third cluster	Fourth and soon
Knowledge	Group meeting	Activity, Operational, Sharing	Discussion, brainstorming, Notes, Video, breafing, practice, rules
Employee	Meeting Operational	Experience, Sharing,	Discussion, practice, training, internalization, habit, evaluation, reminding,

Cluster analysis is in accordance with the SECI Model, because there is a process of changing from tacit knowledge to explicit knowledge. This process can be seen in the knowledge code. Knowledge is divided into group activities in the form of meetings conducted in the organization and initiated by the owner or through group wa. Both of these activities are informal (group wa) and formal (meetings), but both carry out the same activities seen in the third cluster, namely sharing knowledge which is then implemented in the organization's operational activities. The fourth cluster shows the tools and media used in the process of internalizing tacit knowledge into explicit knowledge. The tools and media used are discussions and brainstorming, videos, notes, implementation or practice in operational activities and embodied in organizational rules.

Employees are the main code. This is interesting because it shows that in SME's employees are a very important subject in terms of knowledge management. This can be understood because the knowledge management process in MSMEs does not fully use technology. Human is a very important factor, especially because in MSMEs tacit knowledge is more dominant than explicit knowledge. Employees gain knowledge from two sources, namely from meeting activities both formal and informal and from the company's operational activities. Information from operational activities shows the observation process they carry out so that they get tacit knowledge. They then share this knowledge and internalize it into experiences which then become habits. Habits that arise as a result of tacit knowledge will become explicit knowledge through reinforcement through training, reminding and evaluation.

4. Conclusion

The research confirmed the SECI Model in knowledge management at SMEs. Employees or human factors are the most important factors in the knowledge management process at SMEs. The process of changing tacit knowledge into explicit knowledge through two main clusters, namely human and knowledge and internalized through two formal and informal channels. The sharing process is carried out through meetings and implementation in the company's operational activities using tools and media that can be accepted by organizational members. The process of strengthening tacit knowledge into explicit knowledge will always be reminding and evaluating.

It is hoped that future research on the role of digital technology in supporting KM practices in MSMEs will be an important step, given the rapid development of technology, so that the benefits and challenges of its use can be identified. In addition, comparative research between MSME sectors can also provide insight into the variety of needs and optimal strategies. Finally, studies on the relationship between KM practices and the business performance of MSMEs can provide a practical picture of the real impact of knowledge management on business growth and sustainability. By continuing research on these aspects, it is hoped that the development of more relevant and effective knowledge management strategies can support the improvement of competitiveness and sustainability of MSMEs in the future.

5. Referensi

- [1] Ebrahimi, B. P. (2000). Environmental complexity, importance, variability and scanning behavior of Hong Kong executives. *International Business Review*, 9(2), 253–270. [https://doi.org/10.1016/s0969-5931\(99\)00039-6](https://doi.org/10.1016/s0969-5931(99)00039-6)
- [2] Zott, C. (2013). The business model: A theoretically anchored robust construct for strategic analysis. *Strategic Organization*, 11(4), 403–411. <https://doi.org/10.1177/1476127013510466>
- [3] Teece, D. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2), 172–194. <https://doi.org/10.1016/j.lrp.2009.07.003>
- [4] Dougherty, D. (1992). Interpretive Barriers to Successful Product Innovation in Large Firms. *Organization Science*, 3(2), 179–202. <https://doi.org/10.1287/orsc.3.2.179>
- [5] Bitner, M. J., Carey, W. P., Ostrom, A. L., & Morgan, F. N. (2007). Service Blueprinting: A Practical Technique for Service Innovation PetSmart Chair in Services Leadership Center for Services Leadership Service Blueprinting: A Practical Technique for Service Innovation. *California Management Review*, 850–474.
- [6] Hock-Doepgen, M., Clauss, T., Kraus, S., & Cheng, C. F. (2021). Knowledge management capabilities and organizational risk-taking for business model innovation in SMEs. *Journal of Business Research*, 130, 683–697. <https://doi.org/10.1016/j.jbusres.2019.12.001>
- [7] Wee, J. C. N., & Chua, A. Y. K. (2013). The peculiarities of knowledge management processes in SMEs: The case of Singapore. *Journal of Knowledge Management*, 17(6), 958–972. <https://doi.org/10.1108/JKM-04-2013-0163>
- [8] Zhang, X. D. (2017). *Matrix analysis and applications*. Cambridge University Press
- [9] Martínez-Costa, M., Jiménez-Jiménez, D., & Dine Rabeh, H. A. (2019). The effect of organisational learning on interorganisational collaborations in innovation: an empirical study in SMEs. *Knowledge Management Research & Practice*, 17(2), 137-150
- [10] Bitner, M. J., Carey, W. P., Ostrom, A. L., & Morgan, F. N. (2007). Service Blueprinting: A Practical Technique for Service Innovation PetSmart Chair in Services Leadership Center for Services Leadership Service Blueprinting: A Practical Technique for Service Innovation. *California Management Review*, 850–474.
- [11] Nonaka, I., Toyama, R., & Konno, N. (2002). SECI, Ba, and Leadership. *Managing Industrial Knowledge - Creation, Transfer and Utilization*, 33, 13–43. www.elsevier.com/locate/lrp
- [12] Bushman, B. J., Rothstein, H. R., & Anderson, C. A. (2010). Much Ado About Something: Violent Video Game Effects and a School of Red Herring: Reply to Ferguson and Kilburn (2010). *Psychological Bulletin*, 136(2), 182–187. <https://doi.org/10.1037/a0018718>
- [13] Roos, G., & Roos, J. (1997). Measuring your company's intellectual performance. *Long Range Planning*, 30(3), 413–426. [https://doi.org/10.1016/s0024-6301\(97\)00022-8](https://doi.org/10.1016/s0024-6301(97)00022-8)
- [14] Nonaka, I., & Toyama, R. (2015). The Knowledge-creating Theory Revisited: Knowledge Creation as a Synthesizing Process. *The Essentials of Knowledge Management*, August, 95–110. https://doi.org/10.1057/9781137552105_4
- [15] Yang, G., Yin, S., Zhou, R., Gu, L., Yan, B., & Liu, Y. (1989). Studies of safe maximal daily dietary Se-intake in a seleniferous area in China. Part II: Relation between Se-intake and the manifestation of clinical signs and certain biochemical alterations in blood and urine. *Journal of trace elements and electrolytes in health and disease*, 3(3), 123-130.